

a control parameter setting step of setting a control parameter related to at least one of the recording and the reproduction of the optical disk; and

a control step of changing the control parameter set during the control parameter setting step, repeating the recording and reproduction performed during the recording and reproduction step and the detection performed during the detection step every time the control parameter is changed, and determining the control parameter based on the quality of the signal detected during the detection step.

REMARKS

Claims 1-20 are pending in the application. Claims 1 and 11 have been amended herein. Favorable reconsideration of the application, as amended, is respectfully requested.

Claims 1 and 11 have been amended in order to clarify further the distinctions between the present invention and that which is described in the art of record. The amendments are not intended to change substantially the scope of the original claims, but rather are provided in an effort to make more clear the distinctions as originally intended.

**I. REJECTION OF CLAIMS 1, 2, 7, 9, 11, 12, 17 and 19 UNDER 35 USC § 103(a)**

Claims 1, 2, 7, 9, 11, 12, 17 and 19 stand rejected under 35 USC § 103(a) based on acknowledged prior art *JP4-141827* in view of *Moriya et al.* Withdrawal of the rejection is respectfully requested for at least the following reasons.

Regarding claims 1 and 11, the Examiner contends that *JP4-141827* discloses a basic parameter testing/calibration capability. The Examiner notes that *JP4-141827* does not specifically mention a spiral track environment and that information can be recorded on/in all areas. However, the Examiner contends that *Moriya et al.* teaches the capability of recording information on/in all areas.

Consequently, the Examiner contends it would have been obvious to modify the system described in *JP4-141827* based on *Moriya et al.* so as to function in connection with an optical disk having information recorded on/in all areas.

*Distinctions over JP4-141827:*

Applicants consider there to be significant distinguishing features of the present invention as compared to *JP4-141827*. For example, the background section of the present application describes how the teaching of *JP4-141827* may be applied to an optical disk having information recorded both on land tracks and groove tracks. However, it is pointed out that *the relevant control parameters must be obtained by repeating the recording and reproduction process for each land track and groove track separately*. Therefore, a longer time and more effort is required compared with the case of using only one of either the groove track or the land track. (See, e.g., spec, pages 3-6). Moreover, since such a conventional apparatus must obtain optimum recording focus positions for a land track and a groove track separately, the total time required for achieving optimization is greater than that required by the present invention. (See, e.g., spec, pages 29-30).

The present invention, on the other hand, may be distinguished over such conventional approach in the manner in which the invention records and reproduces the signal from the land and groove tracks. More specifically, the present invention as defined in amended claims 1 and 11 differs from such conventional approach in that *a signal is recorded in both the groove track and land track prior to being reproduced and evaluated for optimization purposes*. The present invention records a signal in *both* the groove track and land track, *and then* reproduces the signal from both the groove track and the land track in order to then perform the appropriate evaluation for purposes of optimization. Such approach is beneficial in that it reduces the time required in order to perform the process. For example, the specification describes a reduction in the number of rotations necessary to achieve the desired settings. (See, e.g., pages 29-30).

Claims 1 and 11 have been amended herein in order to highlight such distinction. For example, claims 1 and 11 refer to recording a signal in both at least one continuous groove track and at least one continuous land track, *and then after recording the signal in both the groove track and the land track*, reproducing the signal from the groove track and the land track. Neither *JP4-141827* nor *Moriya et al.* teach or suggest performing the signal recording with respect to both a groove track and land track, and then after recording the signal in both the groove track and the land track reproducing the signal from the groove track and the land track. Rather, *JP4-141827* and *Moriya et al.* teach the conventional approach of optimizing the parameters of the land track and groove track separately by first performing a recording and reproduction of signals from the land track, for example, and then performing a recording and reproduction of signals from the groove track. Hence, *JP4-141827* and *Moriya et al.* suffer from the aforementioned drawbacks associated with requiring a longer time to arrive at the appropriate control parameters.

Accordingly, claims 1 and 11 may be patentably distinguished over *JP4-141827* and *Moriya et al.* as can claims 2, 7, 9, 12, 17 and 19 which depend therefrom. Withdrawal of the rejection is respectfully requested.

## **II. REJECTIONS OF REMAINING CLAIMS UNDER 35 USC §103(a)**

Claims 3-6, 8, 10, 13-16, 18 and 20 are rejected under 35 USC §103(a) based on *JP4-141827* and *Moriya et al.* in combination with the *acknowledged prior art*, *Johann et al.* and *Pietrzykoski et al.* Withdrawal of each of the respective rejections is respectfully requested for at least the following reasons.

Claims 3-6, 8, 10, 13-16, 18 and 20 each depend from amended claim 1 or 11 either directly or indirectly. Consequently, these claims can be distinguished over the teachings of *JP4-141827* and *Moriya et al.* for at least the same reasons stated above. That is to say, neither *JP4-141827* nor *Moriya et al.* teach or suggest performing the signal recording with respect to both a groove track and

land track, and then after recording the signal in both the groove track and the land track reproducing the signal from the groove track and the land track.

Furthermore, the *acknowledged prior art*, *Johann et al.* and *Pietrzykoski et al.* have not been found to make up for such deficiencies. Accordingly, withdrawal of the rejection is respectfully requested.

### **III. CONCLUSION**

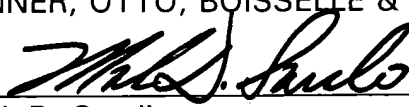
Accordingly, all claims 1-20 are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

  
August 4, 2000  
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